



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 4712

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze e Politiche Ambientali**

Scientist- in - charge: **Diego Rubolini**

Virginia Morera Pujol

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Morera-Pujol
Name	Virginia
Date of birth	21st June 1985

PRESENT OCCUPATION

Appointment	Structure
Project Coordinator	Publicly funded project at the University of Barcelona: <i>Interactions between seabirds and fisheries and their coverage by the Spanish network of Marine Protected Areas</i> 1/12/2019 - 31/11/2020 Roles: <ul style="list-style-type: none">- Modelling of foraging distributions of seabirds, analysis of fisheries data, and interactions between seabirds and fisheries- Presentation of results and writing report for the funding institution- Coordinating fieldwork, managing budget

EDUCATION AND TRAINING

Degree	Course of studies	University	year of degree achievement
Degree	Biology (bachelor)	Universitat Autònoma de Barcelona (Spain)	2005
Specialization	Biology with marine itinerary	Universidad de La Laguna (Tenerife, Spain)	2008
PhD	Biodiversity	Universitat de Barcelona (Spain)	2020
Master	Biodiversity	Universitat de Barcelona (Spain)	2013
Short Course	Spatial modelling with inlabru	CREEM (Centre for the research into ecological and environmental modelling), University of St. Andrews (Scotland)	2018
Short Course	Modelling species distributions: methods and applications	Statistical Ecology Modelling Group and Bayesian Research Group (VaBaR), University of Valencia (Spain)	2017
Short Course	Spatial and Spatiotemporal	<i>Bergamo University, Italy</i>	2016



	Analysis Bayesian Models with R-INLA		
Short Course	ArcGIS 10 User Course	<i>Autonomous University of Barcelona</i>	2015

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City
2013	SEO/BirdLife (Sociedad Española de Ornitología)	Madrid (Spain)
2016	BOU (British Ornithologists' Union)	Peterborough (UK)
2017	The Seabird Group	Larbert (UK)

FOREIGN LANGUAGES

Languages	level of knowledge
Catalan	Native
Spanish	Native
English	Fluent
Portuguese	Conversational

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2020	PhD awarded with honours (Cum Laude)
2018	EMBO short-term fellowship , awarded to the project “using innovative Bayesian methods to investigate fine-scale processes affecting spatial distribution of two species of seabirds: a metapopulation approach” (EUR 7,576.2)
2018	The Seabird Group small grant , awarded to the project “Using novel modelling techniques to investigate the at sea distribution and between-individuals interaction of two closely related species of shearwaters in the Atlantic and Mediterranean” (GBP 500.0)
2015	PhD funding obtained from the Spanish Ministry of Economy and competitiveness. Thesis title “Multi-colony approaches to study migratory and foraging strategies in pelagic seabirds” (4 yrs, EUR 163,350)

TRAINING OR RESEARCH ACTIVITY

<p><u>Research appointments</u></p> <p>01/12/2019 - 31/11/2020 (9 months) Project coordinator at the University of Barcelona (Spain): “Interactions between seabirds and fisheries and their coverage by the Spanish network of Marine Protected Areas.” (Coordination of a Spanish government funded project). Duties included:</p> <ul style="list-style-type: none">- Modelling of foraging distributions of seabirds, analysis of fisheries data, and interactions between seabirds and fisheries- Presentation of results and writing report for the funding institution- Coordinating fieldwork, managing budget



Research expeditions led

Veneguera cliffs, Gran Canaria (Spain). July - August 2017: research expedition to ring, obtain tracking data (GPS and GLS), biometrical measures, and biological samples of Cory's shearwaters (*Calonectris borealis*) breeding in the cliffs to the Southwest of Gran Canaria.

Timanfaya National Park, Lanzarote (Spain). July - September 2016: research expedition to ring, obtain tracking data (GPS and GLS), biometrical measures, and biological samples of Cory's shearwaters (*Calonectris borealis*) breeding inside the National Park.

Timanfaya National Park, Lanzarote (Spain). July - August 2015: research expedition to ring, obtain tracking data (GPS and GLS), biometrical measures, and biological samples of Cory's shearwaters (*Calonectris borealis*) breeding inside the National Park.

Technical skills

Experience with tracking devices: I've programmed, deployed, recovered, and analysed data from a wide array of logging devices. GPS/GSM devices from Orintela, GPS devices by Technosmart and CatLog, and GLS devices from Migrate Technology and Biotrack.

R programming language:

- Co-author of published package trak2KBA to facilitate the identification of areas of importance for biodiversity, such as Key Biodiversity Areas (KBAs), based on individual tracking data (<http://doi.org/10.5281/zenodo.3823902>)
- Experience with spatial analysis packages such as sp, sf, raster
- Experience with data visualisation packages such as ggplot2, rasterVis
- Experience programming within the tidyverse suit of packages

GIS Software: ArcGIS Pro

- Experience with Analyst and Spatial Analyst toolboxes
- Experience producing publishable maps

Species distribution modelling experience

- Application of Ensemble Species Distribution Models to wintering distributions of seabirds
- Application of INLA point pattern models to foraging distributions of seabirds
- Some experience with MAXENT and spatstat modelling packages

Other research activities

Organisation of International Conferences: IAPC6 (6th International Albatross and Petrels Conference), Barcelona, September 2016. Participation in the organising committee.

Reviewer in several journals: Animal Behaviour (1), Chemosphere (1), Marine Biology (3), Regional Environmental Change (1), Endangered Species Research (1), Animal Conservation (1) and the European Journal of Wildlife Research (2).

Participation in the Scientific Committee of the 2nd Ornithological conference of Catalan speaking countries (COTPC), 10th - 12th October 2020

Chair of the 6th World Seabird Twitter Conference (WSTC6). A volunteer led online only conference through Twitter, aimed at sharing rigorous scientific advances with a larger audience than in situ scientific conferences. 4th - 6th May 2020

PROJECT ACTIVITY

Year	Project
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2019 - 2020	Name: Interactions between seabirds and fisheries and their coverage by the Spanish network of Marine Protected Areas Funding: Fundación Biodiversidad from the Spanish Ministry for Ecological Transition and Demographical Challenge Role: Project coordinator
2017 - 2019	Name: Seabirds as tools for a dynamic management of protected areas and fisheries Funding: Spanish National Programme for Research Role: research and field team
2017 - 2018	Name: Evaluating the Spanish Marine Protected Areas Network (RAMPE) for the conservation of seabirds in the Spanish Eastern Mediterranean Coast Funding: Fundación Biodiversidad from the Spanish Ministry for Ecological Transition and Demographical Challenge Role: research and field team
2015 - 2018	Name: Sentinels of the sea: remote monitoring of seabirds applied to the adaptive management of the National Parks network Funding: National Parks Autonomus Agency, Spanish Ministry of Agriculture, Food and Environment Role: research and field team
2014 - 2016	Name: Seasonal interactions and carry-over effects in seabirds Funding: Spanish National Programme for Fostering Excellence in Scientific and Technical Research Role: trainee and field team

CONGRESSES AND SEMINARS

Date	Title	Place
14th - 16th September 2020	Invited oral presentation: "Looking for food: insights into environmental and conspecific cues from Bayesian spatial models with INLA" Morera-Pujol V, Ramos R, Reyes-González JM, Cruz-Flores M, Illian JB, González-Solís J <i>29th International Environmetrics Society (TIES) Conference</i>	London (UK) *cancelled due to COVID-19 travel restrictions
1st - 3rd July 2020	Oral presentation: "Spatial mismatch between seabird-fishery interactions and marine protected areas: where do we go from here?" Morera-Pujol V, Navarro-Herrero L, Ramos R, ..., Jacob González-Solís <i>VII International Symposium on Marine Science</i>	Barcelona (Spain) *Performed virtually due to COVID-19 travel restrictions
13th - 17th November 2019	Oral presentation: "Ecological divergence in wintering distributions of the Calonectris shearwater complex: what can we learn from migratory connectivity and habitat selection?" Morera-Pujol V, Catry P, Magalhães M, Péron C, Reyes-González JM, Granadeiro JP, Militão T, Dias MP, ..., González-Solís J, Ramos R <i>XXIV Spanish and VII Iberic Ornithology Conference</i>	Cádiz (Spain)



3rd - 6th September 2018	Oral presentation: “Unraveling the drivers of at-sea foraging distribution in a long-range seabird” Morera-Pujol V , Ramos R, Reyes-González JM, Cruz-Flores M, González-Solís J <i>14th International Seabird Group Conference</i>	Liverpool (UK)
28th - 30th March 2017	Oral presentation: “The big picture for pelagic shearwaters: global distribution of Calonectris shearwaters across the Mediterranean, Atlantic and Indian Oceans” Morera-Pujol V , Péron C, Catry P, Reyes-González JM, Granadeiro JP, Militão T, Dias MP, ..., González-Solís J, Ramos R <i>British Ornithologists’ Union Conference</i>	Warwick (UK)
19th - 23rd September 2016	Oral presentation: “Is intraspecific competition influencing at sea distribution of seabirds from neighbouring colonies?” Morera-Pujol V , Reyes-González JM, Gomes-Correia N, Cruz-Flores M, Ramos R, González-Solís J <i>6th International Albatross and Petrels Conference</i>	Barcelona (Spain)

PUBLICATIONS

Books
Reyes-González, J. M.; Zajková, Z.; Morera-Pujol, V ; De Felipe, F.; Militão, T.; Dell’Ariccia, G.; Ramos, R.; Igual, J. M.; Arcos, J. M. y González-Solís, J. 2017. Migración y ecología espacial de las poblaciones españolas de pardela cenicienta. Monografía n.º 3 del programa Migra. SEO/BirdLife. Madrid. https://doi.org/10.31170/0056

Articles in Peer Reviewed Journals
Borray-Escalante, N. A., Mazzoni, D., Ortega-Segalerva, A., Arroyo, L., Morera-Pujol, V. , González-Solís, J., & Senar, J. C. (2020). Diet assessments as a tool to control invasive species: comparison between Monk and Rose-ringed parakeets with stable isotopes. <i>Journal of Urban Ecology</i> , 6(1). doi:10.1093/jue/juaa005
Ramos, R., Reyes-González, J. M., Morera-Pujol, V. , Zajková, Z., Militão, T., & González-Solís, J. (2020). Disentangling environmental from individual factors in isotopic ecology: A 17-year longitudinal study in a long-lived seabird exploiting the Canary Current. <i>Ecological Indicators</i> , 111, 105963. doi:10.1016/j.ecolind.2019.105963
Ramos, R., Morera-Pujol, V. , Cruz-Flores, M., López-Souto, S., Brothers, M., & González-Solís, J. (2019). A geolocator-tagged fledgling provides first evidence on juvenile movements of Cory’s Shearwater <i>Calonectris borealis</i> . <i>Bird Study</i> , 66(2), 283-288. doi:10.1080/00063657.2019.1638341
Morera-Pujol, V. , Ramos, R., Pérez-Méndez, N., Cerdà-Cuellar, M., & González-Solís, J. (2018). Multi-isotopic assessments of spatio-temporal diet variability: the case of two sympatric gulls in the western Mediterranean. <i>Marine Ecology Progress Series</i> , 606(02), 201-214. doi:10.3354/meps12763
Cabezón, O., Cerdà-Cuellar, M., Morera-Pujol, V. , García-Bocanegra, I., González-Solís, J., Napp, S., ... Almería, S. (2016). <i>Toxoplasma gondii</i> infection in seagull chicks is related to the consumption of freshwater food resources. <i>PLoS ONE</i> , 11(3), 1-11. doi:10.1371/journal.pone.0150249



OTHER INFORMATION

Software developed

Martin Beal, Steffen Opper, Jonathan Handley, Lizzie Pearmain, **Virginia Morera-Pujol**, Mark Miller, Phil Taylor, Ben Lascelles, & Maria Dias. (2020, May 13). BirdLifeInternational/track2kba: First Release (Version 0.5.0). Zenodo. <http://doi.org/10.5281/zenodo.3823902>

Science communication

Morera-Pujol V, Reyes-González JM, González-Solís J. 2017. Pardelas en el mar canario: viejas vecinas, nuevas aliadas para la conservación. MAKARONESIA (Bol. Asoc. Am. Mus. Cienc. Nat. Tfe), n° 18 - 19: 198 - 21

Participation in Pint of Science: Why do gulls love trash food? Barcelona, May 2017

First authored articles under review

Morera-Pujol V, Catry P, Magalhães MC, Péron C, Reyes-González JM, Granadeiro JP, Militão T, Dias MP, Oro D, Dell’Omo G, Müller M, Paiva VH, Metzger B, Neves VC, Navarro J, Karris G, Xirouchakis S, Cecere JG, Zamora-López A, Forero MG, et al (2019) Detecting recurrent sources of variability in animal tracking studies. Ecol. Appl. (undergoing 3rd round of reviews)



Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Barcelona, 7th October 2020

SIGNATURE
